

Temperature switch

Model TSM-550

Switzer data sheet TSM-550

Applications

- Pumps, filters
- Lubrication system, hydraulic system
- HVAC
- Circuit breakers
- Turbines

Special features

- Wide adjustable range
- Adjustable on-off differential
- Sturdy snap action switch
- Repeatability $\pm 1\%$
- Weatherproof to IP67

Description

The TSM-550 is used in industrial control, monitoring and alarm applications.

The switch point can be specified by the customer on site.

The instrument can switch electrical loads of up to AC 230V, 10A.

The TSM-550 temperature switch offers many application possibilities with non-corrosive media.



Temperature switch, model TSM-550

Standard version

Switch enclosure

Cover: ABS Plastic

Housing: DMC

Repeatability

±1 % of full scale value

Permissible ambient temperature

-40 °C ... +70 °C

Permissible medium temperature

Refer range table

Measuring system

Vapor filled thermal system with Phosphor bronze /

SS bellows

Wetted parts

■ Copper bulb (standard)

■ SS bulb (optional)

Range

Refer ordering matrix

Switch contacts

One SPDT contact system

On-off differential

Adjustable

Electrical rating

One SPDT contact system

■ AC-1: 10A, 230V 50/60 Hz

■ AC-15: 4A, 230V 50/60 Hz

■ DC-13: 12W 230V

Electrical entry

1/2" NPT(F)

Ingress protection

IP67

Mounting

Wall, panel

Weight

Approx. 700 grams

Ordering matrix

Range code	Range in °C	Capillary Length Meters (M)	Adjustable differential				Maximum working temperature in deg C
			Contact system / S type microswitch		D type microswitch		
			At min. temp	At max. temp	At min. temp	At max. temp	
T1	25 ... 90	3, 5, 8	2.4 ... 10	3.5 ... 20	5.5 ... 11	7 ... 22	300
T2	70 ... 150	3, 5, 8	6 ... 25	1.8 ... 6	12 ... 28	4 ... 6	215
T3	120 ... 215	3, 5, 8	7 ... 30	1.8 ... 9	14 ... 32	4 ... 9	260
T4	150 ... 250	3, 5, 8	6.5 ... 30	1.8 ... 9	13 ... 32	4 ... 9	300
T5	200 ... 300	3, 5, 8	5 ... 25	2.5 ... 10	10 ... 30	5 ... 12	350

★ In range 120 ... 215°C and 150 ... 250°C Capillary length 3 & 8 are non-standard thermal system. Available only on extended delivery basis. 10 & 12 Meters long thermal systems are available on request. Contact sales for price and delivery

Ordering matrix continued

Sensing element

Tin plated copper bulb and copper capillary with stainless steel armour on capillary

Capillary length

- 3** 3 meters
- 5** 5 meters
- 8** 8 meters
- S** Special

Bulb and capillary material

- C** Copper
- S** 304 SS

Contact version

- C** One SPDT contact system.
- S** One SPDT microswitch
15A Res. 125/250V AC
15A Ind. 125/250V AC
0.5A Res.125V / 0.25A 250V DC
6A Ind. 30V / 0.05A 125V / 0.03A 250V DC
- D** DPDT microswitch
10A 125/250V AC, 2A 480V AC
0.25A 250V DC

Switch enclosure

- D** ABS, plastic cover with polyester housing, weatherproof to IP67 as per IS/IEC:60529-2001 (standard)
- A** Aluminium, powder coated cover with Die cast aluminium housing, weatherproof to IP67 as per IS/IEC:60529-2001

Thermowell

- WO** Without thermowell
- B1** 3/4" NPT Brass bulb pocket 111 mm length
- B2** 1/2" BSP Brass bulb pocket 111 mm length
- S1** 3/4" NPT 304 SS bulb pocket 111 mm length
- S2** 1/2" BSP 304 SS bulb pocket 111 mm length
- TW** Non standard thermowell

Bulb details

Rang code	Range in °C	Capillary Length Meters (M)	Bulb dia	Blub length	
				Copper	SS
T1	25 ... 90	3, 5, 8	9.5	80	69
T2	70 ... 150	3, 5, 8	9.5	80	69
T3	120 ... 215	3, 5, 8	9.5	110	102
T4	150 ... 250	3, 5, 8	9.5	110	102
T5	200 ... 300	3, 5, 8	11	Not available	102

Model Number to be ordered as below



Example

Model: TSM-550

Range: 25 ... 90°C

Capillary length: 5 meters

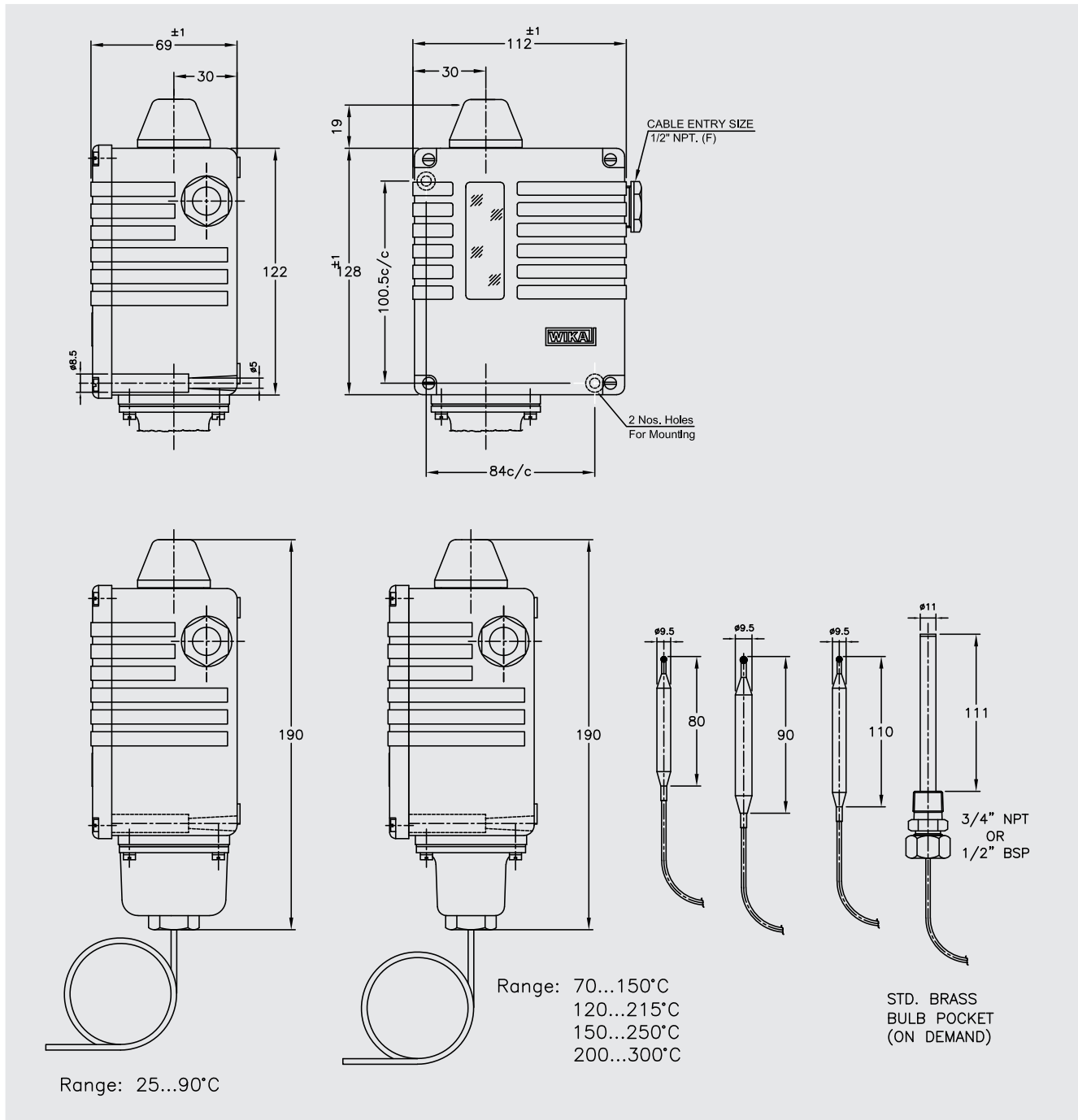
Bulb and capillary material: 304 SS

Contact version: One SPDT contact system

Switch enclosure: ABS, plastic cover with polyester housing, weatherproof to IP67 as per IS/IEC 60529-2001 (standard)

Thermowell: 1/2" BSP 304 SS bulb pocket 111mm length.

Dimensions in mm



Ordering information

Model / Range / Capillary length / Contact version / Switch enclosure

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Switzer Process Instruments Pvt. Ltd.

Regd.Off, Works-1 and Sales

128 SIDCO North Phase
Ambattur Industrial Estate, Chennai 600 098
Tel. +91 44 2625 2017 / 2018 / 4991 / 4324
sales@switzerprocess.co.in
www.switzerprocess.co.in

Works-2

C-123, Site No.1, Industrial Area
Bulandshahar Road, Ghaziabad 201 009